



ROY COOPER
Governor

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MICHAEL A. ABRACZINSKAS
Director

XXXXXX, 2018

Mr. Russell Schwartz
General Manager
West Fraser, Inc. - Armour Lumber Mill
361 Federal Road
Riegelwood, North Carolina 28456

SUBJECT: Air Quality Permit No. 02248T30
Facility ID: 2400125
West Fraser, Inc. - Armour Lumber Mill
Riegelwood, Columbus County, North Carolina
Fee Class: Title V
PSD Class: Major

Dear Mr. Schwartz:

In accordance with your completed Air Quality Permit Applications for a TV Permit Renewal received January 28, 2016; a Significant Modification under 02Q .0501(c)(1) received September 19, 2016; and a "Part 2" Significant Modification under 02Q .0501(c)(2) received February 23, 2018, we are forwarding herewith Air Quality Permit No. 02248T30 to West Fraser, Inc. - Armour Lumber Mill in Riegelwood, North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215.108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Columbus County has triggered increment tracking under PSD for PM₁₀ and SO₂. Any increment changes associated with the modifications/renewal were addressed in the Part 1 permit application (No. 2400125.17B).

This Air Quality Permit shall be effective from XXXX, 2018 until XXXX, 2023, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Should you have any questions concerning this matter, please contact Betty Gatano, P.E., at (919) 707-8736 or betty.gatano@ncdenr.gov.

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section
Division of Air Quality, NCDEQ

Enclosure

c: Heather Ceron, EPA Region 4
Wilmington Regional Office
Central Files
Connie Horne (cover letter only)

ATTACHMENT to Permit No. 02248T30

Insignificant Activities per 15A NCAC 02Q .0503(8)

Emission Source ID No.	Emission Source Description
I-Roads	Haul Roads
IES-GTS-1	1,000 gallon above ground gasoline storage tank
IES-DST-1	10,000 gallon above ground diesel storage tank
IES-UOST-1	1,000 gallon above ground used oil storage tank
IF-S-1	Holtec saw
IF-SB-1	Shavings bin
IF-SB-2	Shavings bin (Wood Residuals Hogged Planer) completely enclosed
IF-SB-3	Sawdust bin completely enclosed
IF-TB	Top loading truck bin
IES-Fug-L1-2	Log sawing operation
IES-FP-1 MACT ZZZZ	Diesel-fired emergency fire water pump (185 brake horsepower)
IES-FP-2 MACT ZZZZ, NSPS IIII	Diesel-fired emergency fire water pump (183 brake horsepower)
IES-EG-1 MACT ZZZZ	Diesel-fired emergency generator (166 brake horsepower)

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the Permittee is exempted from demonstrating compliance with any applicable requirement.
2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 "Control of Toxic Air Pollutants" or 02Q .0711 "Emission Rates Requiring a Permit."
3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled "Specific Permit Conditions Regulatory Guide." The link to this site is as follows: <http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide>.

Summary of Changes

The following changes were made to the West Fraser, Inc. – Armour Lumber Mill – Riegelwood, NC; Air Permit No. 02248T29:

Pages	Section	Description of Changes
Throughout permit and cover letter	-	Updated all dates and permit revision numbers.
Insignificant activities list	--	<ul style="list-style-type: none"> Moved the diesel-fired emergency water pump (ID No. IES-FP-1) and diesel-fired emergency generator (ID No. ES-IEG-1) to the insignificant activities list. These engines meet the definition of insignificant activities under 15A NCAC 02Q .0503(8). Added a sawdust bin to the insignificant activities list (ID No. IF-SB-3). This is an existing source.
Cover page	--	Removed footnote stating, "This permit shall expire on the earlier of September 30, 2022 or the renewal of Permit No. 02248T27 has been issued or denied."
3	Section 1.0 – Equipment List	<ul style="list-style-type: none"> Changed the description of the woodwaste collection system (ID No. ES-WW1) to the "Planer Machine." Changed the description of the woodwaste collection system (ID No. ES-WW2) to the "Planer Trim Saw and Hog." Added cyclone (ID No. CD-D1-1) as control to the Planer Trim Saw and Hog (ID No. ES-WW2). The emission source can use either cyclone (ID Nos. CD-C1-1 or CD-D1-1) but cannot operate both cyclones simultaneously. Removed wood residuals hogged planer (ID No. ES-WW3). This emission source is more appropriately considered as part of planer trim saw and hog operations (ID No. ES-WW2). Modified the description of the continuous steam-heated, dual path lumber drying kilns (ID Nos. ES-CDPK1 and ES-CDPK2) to be consistent throughout the permit. Modified the throughput of the steam-heated, low temperature lumber drying kiln (ID No. ES-K1-4). Removed "MBF" and expressed the throughput of the kilns numerically. Moved the diesel-fired emergency water pump (ID No. IES-FP-1) and diesel-fired emergency generator (ID No. IES-EG-1) to the insignificant activities list. Added MACT Subpart DDDDD label to the hybrid suspension grate wood-fired boiler (ID No. ES-BW-1). Added footnote stating the Permittee shall comply with the CAA §112(j) standard until May 19, 2019. Added footnote stating the Permittee shall comply with MACT Subpart DDDDD beginning May 20, 2019. Removed footnote stating the emission source (ID No. ES-WW3) and associated cyclone (ID No. CD-D1-1) are listed as a 15A NCAC 02Q .0501(c)(2) modification.
4 – 5	2.1 A – Equipment List and throughout permit condition	<ul style="list-style-type: none"> Updated the woodworking operations and control configuration. Removed references to emission source (ID No. ES-WW3)
5	2.1 A.2.c	Updated permitting language under 15A NCAC 02D .0521 to the current version.

Pages	Section	Description of Changes
--	--	Removed permit condition for 15A NCAC 02Q .0504. This requirement was met with the submittal of Permit Application No. 2400125.18A.
6	2.1 B – Equipment List	Changed the description of the boiler to “hybrid suspension grate wood-fired boiler.”
6	2.1 B – Regulations Table	<ul style="list-style-type: none"> Reordered the table to follow order of regulations. Added reference to MACT Subpart DDDDD.
6	2.1 B.1.c	Updated test dates for boiler under 15A NCAC 02D .0504.
--	2.1 B.3.c (old numbering)	<ul style="list-style-type: none"> Removed requirements to re-establish “normal” opacity within 30 days of permit issuance. Renumbered permit condition accordingly.
7	2.1 B.3.c (new numbering)	Updated permitting language under 15A NCAC 02D .0521 to the current version.
8	2.1 B.4	<ul style="list-style-type: none"> Moved permit condition for 15A NCAC 02D .0530(u) to follow order of regulations. Renumbered permit accordingly.
8 – 9	2.1 B.5	Updated permitting language for compliance assurance monitoring under 15A NCAC 02D .0614 to current language.
9	2.1. B.6.b	Modified condition to remove initial compliance date for the Case-by-Case MACT and the date of initial annual compliance certification. These requirements have been met.
10	2.1 B.6.c	Changed testing language to allow testing every five years for any pollutant with emission rates less than or equal to 80 percent of the allowable limit under 15A NCAC 02D .1109, Case-by-Case MACT.
11	2.1 B.6.k	Removed reference to submittal of first summary report. This date occurred in 2014 and is no longer relevant.
11 – 14	2.1 B.7	Added permit condition for 15A NCAC 02D .1111 as promulgated in 40 CFR 63, Subpart DDDDD.
14	2.1 C – Equipment List	Modified the description of the continuous steam-heated, dual path lumber drying kilns (ID Nos. ES-CDPK1 and ES-CDPK2) to be consistent throughout the permit.
14	2.1 C – Regulations Table	<ul style="list-style-type: none"> Removed reference to 15A NCAC 02D .0530(u). No projected actual emissions of PM2.5 were used to avoid applicability to PSD for the continuous dual path kilns (ID Nos. ES-CDPK1 and ES-CDPK2). Added board feet limit for the kilns.
15	2.1 C.1.b	Updated testing language with the current version.
15	2.1 C.3.b	Updated testing language with the current version.
16	2.1 C.3.f	Updated reporting language with the current version.
16	2.1 D.1.b	Updated testing language with the current version.
17	2.1 D.1.e	Updated reporting language with the current version.
--	2.1 E	Removed permit condition for the diesel-fired fire water pump and the diesel-fired emergency generator (ID Nos. IES-FP-1 and IES-EG-1). These emission sources are considered insignificant activities in accordance with 15A NCAC 02Q .0503(8) and were moved to the insignificant activities list.
18 – 26	Section 3	Updated the General Conditions to the current revision (V5.2 04/03/2018).
27	Attachment	Updated the list of acronyms.



State of North Carolina
Department of Environmental Quality
Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.	Effective Date	Expiration Date
02248T30	02248T29	XXXX, 2018	XXXX, 2023

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee: **West Fraser, Inc. – Armour Lumber Mill**
Facility ID: **2400125**

Facility Site Location: **361 Federal Road**
City, County, State, Zip: **Riegelwood, Columbus County, North Carolina, 28456**

Mailing Address: **361 Federal Road**
City, State, Zip: **Riegelwood, Columbus County, North Carolina, 28456**

Application Numbers: **2400125.16A, 2400125.16B, 2400125.18A**
Complete Application Dates: **January 28, 2016, September 19, 2016, February 23, 2018**

Primary SIC Code: **2421**

Division of Air Quality,
Regional Office Address: **Wilmington Regional Office**
127 Cardinal Drive
Wilmington, North Carolina 28405

Permit issued this the XXX day of XXXX, 2018

William D. Willets, P.E., Chief, Permitting Section
By Authority of the Environmental Management Commission

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SECTION 1 - PERMITTED EMISSION SOURCE(S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S) AND APPURTENANCES

This table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

Page No(s).	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
4	ES-WW1	Planer Machine	CD-A1-1	cyclone (192 inches in diameter)
4	ES-WW2	Planer Trim Saw and Hog	CD-C1-1	cyclone (96 inches in diameter)
			OR	OR
			CD-D1-1	cyclone (112 inches in diameter)
4	ES-Fug-L1-1	Log debarking operation	N/A	N/A
6	ES-BW-1 Case-By-Case MACT,¹ MACT DDDDD²	Hybrid suspension grate wood-fired boiler (104.336 million Btu per hour maximum heat input)	CD-3	multicyclone (72 tubes, each nine inches in diameter) venting to
			CD-2	venturi wet scrubber (350 gallons per minute minimum liquid injection rate, based on a 3-hour average)
14	ES-CDPK1 and ES-CDPK2 PSD MACT DDDD	Two continuous steam-heated, dual path lumber drying kilns (each with a maximum drying rate of 137,415,000 board feet of lumber per year)	N/A	N/A
16	ES-K1-4 PSD MACT DDDD	One steam-heated, low temperature lumber drying kiln (with a maximum drying rate of 32,900,000 board feet of lumber per year)	N/A	N/A

1. The Permittee shall comply with this CAA §112(j) standard until **May 19, 2019**.
2. The Permittee shall comply with 40 CFR Part 43, Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters," beginning **May 20, 2019**.

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1- Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

A. Woodworking operations consisting of the following:

- **Planer machine (ID No. ES-WW1) and associated cyclone (ID No. CD-A1-1_**
- **Planer trim saw and hog (ID No. ES-WW2) and associated cyclones (ID Nos. CD-C1-1 or CD-D1-1)**
- **Fugitive debarking operation (ID No. ES-Fug-L1-1)**

The following table provides a summary of limits and standards for the emission sources described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate emissions	Adequate ductwork and properly designed collectors	15A NCAC 02D .0512
Visible emissions	20 percent opacity	15A NCAC 02D .0521

1. 15A NCAC 02D .0512: PARTICULATES FROM MISCELLANEOUS WOOD PRODUCTS FINISHING PLANTS

- a. The Permittee shall not cause, allow, or permit particulate matter caused by the working, sanding, or finishing of wood to be discharged from any stack, vent, or building into the atmosphere without providing, as a minimum for its collection, adequate duct work and properly designed collectors. In no case shall the ambient air quality standards be exceeded beyond the property line.

Monitoring [15A NCAC 02Q .0508(f)]

- b. Particulate matter emissions from the wood material collection systems (**ID Nos. ES-WW1 and ES-WW2**) shall be controlled by three cyclones. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer, if any. As a minimum, the inspection and maintenance program shall include monthly external inspection of the ductwork and cyclones noting the structural integrity. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0512 if the ductwork and cyclones are not inspected and maintained.

Recordkeeping [15A NCAC 02Q .0508(f)]

- c. The results of all inspections and maintenance for the cyclones shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized DAQ representative upon request. The logbook shall record the following:
- i. the date and time of each recorded action;
 - ii. the results of each inspection; and
 - iii. the results of maintenance performed on any control device.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0512 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- d. The Permittee shall submit the results of any maintenance performed on the control devices within 30 days of a written request by the DAQ.
- e. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Sections 2.1 A.1.b and c above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from these woodworking operations (**ID Nos. ES-WW1, ES-WW2, and ES-Fug-L1-1**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.2.a above (**ID Nos. ES-WW1, ES-WW2, and ES-Fug-L1-1**), the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- c. i. To ensure compliance, once a week the Permittee shall observe the emission points of these sources (**ID Nos. ES-WW1, ES-WW2, and ES-Fug-L1-1**) for any visible emissions above normal. The weekly observation must be made for each week of the calendar year period to ensure compliance with this requirement. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
- (A) take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - (B) demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 A.2.a above.
- ii. The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if:
- (A) the above-normal emissions are not corrected per c.i.(A) above;
 - (B) the demonstration in c.i.(B) above cannot be made; or
 - (C) the weekly observations are not conducted per c.i above.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 A.2.c and d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

B. Hybrid suspension grate wood-fired boiler (ID No. ES-BW-1) with multicyclone (ID No. CD-3) and venturi wet scrubber (ID No. CD-2)

The following table provides a summary of limits and standards for the emission sources described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	0.41 pounds per million Btu	15A NCAC 02D .0504
Sulfur dioxide	2.3 pounds per million Btu	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
NSR Pollutants	Annual tracking of wood combustion	15A NCAC 02D .0530(u)
Particulate matter	Compliance Assurance Monitoring	15A NCAC 02D .0614 40 CFR Part 64
Total Selected Metals (TSM) Mercury HCl-Equivalent Carbon Monoxide	0.0003 lbs/mmBtu 5.0e-06 lbs/mmBtu 188.5 lbs/hr 2,800 ppmvd at 3% O ₂ Applicable until May 19, 2019	15A NCAC 02D .1109
Filterable PM or TSM Mercury HCl Carbon Monoxide	4.4E-01 lb per MMBtu of heat input or 4.5E-04 lb per MMBtu of heat input 5.7E-06 lb per MMBtu of heat input 2.2E-02 lb per MMBtu of heat input 3,500 ppmvd at 3% O ₂ Applicable beginning May 20, 2019	15A NCAC 02D .1111 40 CFR Part 63, Subpart DDDDD
Odors	State-enforceable Only See Multiple Emissions Section 2.2 A.1.	15A NCAC 02D .1806

1. 15A NCAC 02D .0504: PARTICULATES FROM WOOD BURNING INDIRECT HEAT EXCHANGERS

- a. Emissions of particulate matter from the combustion of wood that are discharged from this source into the atmosphere shall not exceed 0.41 pounds per million Btu heat input.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0504.
- c. Under the provisions of NCGS 143.215.108, the Permittee shall demonstrate compliance with the emission limit above by testing the source (**ID No. ES-BW-1**) for particulate matter following a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in General Condition JJ. Testing shall be completed by **November 12, 2019** and the results submitted by **December 12, 2019** unless an alternative date is approved by the DAQ. If the results of this test are above the limits given in Section 2.1 B.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0504.

Monitoring [15A NCAC 02Q .0508(f)]

- d. Particulate matter emissions from boiler (**ID No. ES-BW-1**) shall be controlled by a multicyclone (**ID No. CD-3**) and wet venturi scrubber (**ID No. CD-2**). To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
 - i. A monthly external visual inspection of the system ductwork, multicyclone, scrubber, and material collection unit for leaks;
 - ii. Inspection of spray nozzles to detect clogging or corrosion damage of nozzles and perform maintenance and repair when necessary to ensure proper operation of the scrubber;
 - iii. Inspection, cleaning, and calibration of all associated instrumentation; and
 - iv. The performance of any maintenance and repair when necessary to ensure proper operation of the multicyclone and scrubber.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0504 if the multicyclone, scrubber, and ductwork are not inspected and maintained.

Recordkeeping [15A NCAC 02Q .0508(f)]

- e. The results of all inspections and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized DAQ representative upon request. The logbook shall record the following:
 - i. The date and time of each recorded action;
 - ii. The results of each inspection;
 - iii. A report of any maintenance performed on the multicyclone and/or scrubber; and
 - iv. Any variance from manufacturer's recommendations, if any, and corrections made.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0504 if these records are not created and retained.

Reporting [15A NCAC 02Q .0508(f)]

- f. Within 30 days of a written request from the DAQ, the Permittee shall submit a report of any maintenance performed on the multicyclone or scrubber.
- g. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Sections 2.1 B.1.d and e postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and by July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from this source shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the firing of wood in this boiler.

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from this boiler (**ID No. ES-BW-1**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall any six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- c. i. To ensure compliance, once a day the Permittee shall observe the emission points of this source (**ID No. ES-BW-1**) for any visible emissions above normal. The daily observation must be made for each day of the calendar year period to ensure compliance with this requirement. The Permittee shall be allowed three (3) days of absent observations per semiannual period. If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - (A) take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - (B) demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 B.3.a above.

- ii. The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if:
 - (A) the above-normal emissions are not corrected per c.i.(A) above;
 - (B) the demonstration in c.i.(B) above cannot be made; or
 - (C) the daily observations are not conducted per c.i above.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized DAQ representative upon request. The logbook shall record the following:
 - i. The date and time of each recorded action;
 - ii. The results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. The results of any corrective actions performed.
 The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 B.3.c and d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

4. 15A NCAC 02D .0530(u): USE OF PROJECTED ACTUAL EMISSIONS

Reporting [15A NCAC 02Q .0508 (f)]

- a. 15A NCAC 02D .0530(u) Use Of Projected Actual Emissions – Pursuant to 15A NCAC 02D .0530(u) because the Permittee relied on projected actual emissions for the purposes of demonstrating that the proposed CDP kiln project described in Application No. 2400125.11A did not result in a significant emissions increase of any NSR pollutant, except VOCs, over baseline actual emissions, the owner or operator shall submit a report to the Regional Office within 60 days after the end of each calendar year during which these records must be generated. The report shall contain the items listed in 40 CFR 51.166(r)(6)(v)(a) through (c) and the following parameters listed below:

Parameter	Projection (annual unless otherwise provided) *
Tons of wood combusted in the boiler (ID No. ES-BW-1)	81,381 tons of green wood per year

* These projections are not enforceable limitations. If parameter exceeds the projection, consistent with 15A NCAC 02D .0530, the permit shall include in its annual report an explanation as to why the actual rates exceeded the projection.

- b. These records and reports required above shall be maintained for five years following regular operations after the change.

5. 15A NCAC 02D. 0614 “Compliance Assurance Monitoring”

- a. Pursuant to 40 CFR 64 and 15A NCAC 02D .0614, the Permittee shall comply with the conditions below for the hybrid suspension grate wood-fired boiler (ID No. ES-BW-1) with multicyclone (ID No. CD-3) and venturi wet scrubber (ID No. CD-2)

Emission Limitations/Standards

- b. The following table presents the regulated pollutants and the associated emission limitations/standards:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter (PM)	0.41 pounds per million Btu heat input	15A NCAC 02D .0512

Monitoring Approach [15A NCAC 02Q .0508(f), 40 CFR 64.6]

- c. The key elements of the monitoring approach for PM/ PM10 and visible emissions, including parameters to be monitored, parameter ranges and performance criteria are presented in the following table.

Monitoring Elements	Indicator
Measurement Approach [64.6(c)(1)(i), (ii)]	Visible emissions from the venturi scrubber outlet will be monitored <u>daily</u> using a reference method 22-like procedures.
Indicator Range [64.6(c)(2)]	An excursion is defined as the presence of visible emissions. Excursions trigger an inspection and corrective action.
QIP threshold [64.8]	The Permittee shall develop a QIP if the threshold of six excursions in a six-month reporting period is exceeded.
Data Representativeness [64.6(c)(1)(iii), 64.3(b)(1)]	Observations are being made at the emission points (venturi scrubber outlet).
QA/QC Practices and Criteria [64.3(b)(3)]	The observer will be familiar with Method 22 and the follow Method 22-like procedures.
Monitoring frequency [64.3(b)(4)]	One Method 22-like observation shall be performed daily.
Data collection procedure [64.3(b)(4)]	The results of the monitoring action will be recorded, including the date and time.

Recordkeeping Requirements [15A NCAC 02Q .0508(f), 40 CFR 64.9]

- d. The Permittee shall maintain records of the following:
- Date and time and results of all monitoring activities;
 - Information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken; and
 - Written QIP required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan

Reporting Requirements [15A NCAC 02Q .0508(f), 40 CFR 64.9]

- e. The Permittee shall submit a summary report of all monitoring activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations for the requirements of this permit must be clearly identified. At a minimum, the report shall include the following elements:
- Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
 - A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the Permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

6. 15A NCAC 02D .1109: Case-by-Case MACT

- a. The Permittee shall comply with this CAA §112(j) standard for boiler (**ID No. ES-BW-1**) until **May 19, 2019. Starting May 20, 2019** the Permittee shall comply with the applicable CAA §112(d) standard for “National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters.”
- b. Emissions from this source (**ID No. ES-BW-1**) shall not exceed the emissions limits listed below:
- Total Selected Metals (TSM): 0.0003 lbs/mmBtu. TSM is defined as the following: arsenic, beryllium, cadmium, chromium, lead, nickel, selenium. [Manganese shall not be included in the determination of TSM.]
 - Mercury (Hg): 5e-06 lbs/mmBtu
 - Hydrogen Chloride-equivalent (HCl): 188.5 lbs/hr. HCl-equivalent is defined by the following equation:

$$E = E_{HCl} + E_{Cl_2} \cdot (Rf_{HCl} / Rf_{Cl_2})$$

Where: E = HCl-equivalent emission rate (in lbs/hr)

E_{HCl} = HCl emission rate (in lbs/hr);

E_{Cl_2} = Cl_2 emission rate (in lbs/hr);

Rf_{HCl} = Reference concentration for HCl (20 $\mu g/m^3$); and

Rf_{Cl_2} = Reference concentration for Cl_2 (0.20 $\mu g/m^3$).

- iv. Carbon Monoxide (CO): 2,800 ppmvd, corrected to 3% oxygen

These limits apply except for periods of startup, shutdown, and malfunction. The Permittee shall follow the procedures in 15A NCAC 02D .0535 for any excess emissions that occur during periods of startup, shutdown, or malfunction.

Compliance Testing [15A NCAC 02Q .0508(f)]

- c. The Permittee shall conduct compliance tests for each pollutant listed in Section 2.1 B.6.b above. The Permittee may choose either of the following methods for the compliance tests:
 - i. **Stack Testing**. Stack testing shall be performed in accordance with General Condition JJ of this permit. Tests may not be conducted during periods of startup, shutdown, or malfunction. Stack tests shall be conducted biennially. Following the initial stack test, each test shall be conducted between 22 and 26 months after the previous stack test. However, if a stack test shows that the emission rate of any pollutant is less than or equal to 80 percent of the allowable limit, the stack test frequency shall be reduced to once every five years for that pollutant.
 - ii. **Fuel Analysis**. The Permittee may use a fuel analysis to demonstrate compliance with the TSM, mercury, and/or HCl-equivalent standard. Fuel analyses shall be conducted annually. Following the initial fuel analysis, each analysis shall be conducted between 11 and 13 months after the previous analysis. If a fuel analysis shows a potential exceedance of an emission limitation in Section 2.1 B.6.b, the Permittee shall conduct a follow-up stack test of the affected sources within 90 days of the fuel analyses. If the follow-up stack test shows an exceedance of the limit, the Permittee shall be deemed in non-compliance with 15A NCAC 02D .1109.

The Permittee shall be deemed in non-compliance with 15A NCAC 02D .1109 if the required compliance tests are not conducted, or if the results of a compliance test exceed a limit in Section 2.1 B.6.b above.

Work Practice Standards [15A NCAC 02Q .0508(f)]

- d. The Permittee shall conduct monthly and annual inspections of the multicyclone (**ID No. CD-3**) and record the results of inspections as provided in Section 2.1 B.1.d and e of this permit. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if these inspections are not performed or the required records are not created and maintained.

Operating Limits [15A NCAC 02Q .0508(f)]

- e. The Permittee shall maintain the 12-hour block average pressure drop at the wet scrubber (**ID No. CD-2**) at or above the lowest 1-hour average pressure drop measured during the most recent performance test.

Monitoring Requirements [15A NCAC 02Q .0508(f)]

- f. The Permittee shall install, operate, and maintain continuous monitoring systems (CMS) to measure and record the pressure drop at the wet scrubber (**ID No. CD-2**).
 - i. The monitors must complete a minimum of one cycle of operation for each successive 15-minute period. The monitors must record a minimum of four successive cycles of operation to have a valid hour of data.
 - ii. For the purposes of calculating data averages, do not use data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required QA/QC activities.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if the required monitoring is not conducted, or if the monitored operating parameters exceed the minimum limits established pursuant to Section 2.1 B.6.e above.

Recordkeeping [15A NCAC 02Q .0508(f)]

- g. Maintain a copy of each notification and report required by this standard, including all documentation supporting any Notification of Compliance Status. The Permittee shall be deemed in non-compliance with 15A NCAC 02D .1109 if it fails to comply with the recordkeeping requirements
- h. Maintain records of performance tests and fuel analyses. The Permittee shall be deemed in non-compliance with 15A NCAC 02D .1109 if it fails to comply with the recordkeeping requirements.
- i. For each required CMS, maintain the following records:
 - i. All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report);
 - ii. A record of each period during which a CMS is malfunctioning or inoperative (including out-of-control periods);
 - iii. All CMS calibration checks; and,
 - iv. All adjustments and maintenance performed on CMS.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if the required records are not created and maintained.

Reporting [15A NCAC 02Q .0508(f)]

- j. **Notification of Compliance Status.** The Permittee must submit a Notification of Compliance Status that meets the requirements of 40 CFR 63.9(h)(2)(ii) before the close of business on the 60th day following the completion of the final required performance test and/or other initial compliance demonstration. The Notification of Compliance Status report must contain the following information, as applicable:
 - i. A description of the affected source(s) including identification of which subcategory the source is in, the capacity of the source, a description of the add-on controls used on the source description of the fuel(s) burned, and justification for the fuel(s) burned during the performance test.
 - ii. Summary of the results of all performance tests and calculations conducted to demonstrate initial compliance.
 - iii. A certification signed by the Responsible Official that the facility has met all applicable emission limits and work practice standards.
- k. **Semiannual Summary Report.** The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 B.6.f through i above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall include the following:
 - i. Company name and address;
 - ii. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report;
 - iii. Date of report and beginning and ending dates of the reporting period;
 - iv. A summary of the results of the annual performance tests;
 - v. Signed statement indicating that no new types of fuel were fired in the affected sources.

7. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.7485, 40 CFR 63.7490(d), 40 CFR 63.7499(h)]

- a. For this sources (i.e., existing hybrid suspension/grate burners designed to burn wet biomass/bio-based solid with a heat input capacity 10 million Btu per hour or greater), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR Part 63, Subpart DDDDD "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" (Subpart 5D) and Subpart A "General Provisions."
 - i. The Permittee shall comply with the CAA §112(j) standard in Section 2.1 B.6 through **May 19, 2019**. The Permittee shall be subject to the requirements of this standard starting **May 20, 2019**. Note that the requirements of this standard may require action on behalf of the Permittee prior to **May 20, 2019**.

Definitions and Nomenclature [40 CFR 63.7575]

- b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.7575 shall apply.

40 CFR Part 63, Subpart A General Provisions [40 CFR 63.7565]

- c. The Permittee shall comply with the requirements of 40 CFR Part 63, Subpart A, "General Provisions," according to the applicability of Subpart A to such sources as identified in Table 10 to Subpart 5D.

Compliance Date [40 CFR 63.7510(e), 40 CFR 63.56(b)]

- d. The Permittee shall:
 - i. Complete the initial tune up and the one-time energy assessment as required in Section 2.1 B.7 r through v no later than May 20, 2019.
 - ii. Complete the initial compliance requirements in Section 2.1 B.7.j no later than November 16, 2019 and according to the applicable provisions in 40 CFR 63.7(a)(2).

General Compliance Requirements [40 CFR 63.7505(a), 40 CFR 63.7500]

- e. At all times the affected unit(s) is operating, the Permittee shall be in compliance with the emission standards in Section 2.1 B.7.g, except during periods of startup and shutdown. During startup and shutdown, the Permittee shall comply only with items 5 and 6 of Table 3 of Subpart 5D.
- f. At all times, then Permittee shall operate and maintain any affected source (as defined in 40 CFR 63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may

include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

Emission Limits [15A NCAC 02Q .0508(f), 40 CFR 63.7500(a)(1), Table 2]

- g. The affected unit(s) shall meet the following emission limits:

Pollutant	Emission Limit
Hydrochloric Acid (HCl)	2.2E-02 lb per MMBtu of heat input
Mercury (Hg)	5.7E-06 lb per MMBtu of heat input
Carbon monoxide (CO)	3,500 ppm by volume on a dry basis corrected to 3 percent oxygen, 3 run average or (900 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average)
Filterable Particulate Matter(PM) or Total Suspended Metals (TSM)	4.4E-01 lb per MMBtu of heat input or 4.5E-04 lb per MMBtu of heat input

Testing [15A NCAC 02Q .0508(f)]

- h. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test(s) are above the limits given in Section 2.1 B.7.g above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

Notifications [15A NCAC 02Q .0508(f), 40 CFR 63.7545(d), 40 CFR 63.7530]

- i. The Permittee shall submit the following notifications:
- The Permittee shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin.
 - For the initial compliance demonstration for each affected source, the Permittee shall submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations for all affected sources at the facility. The Notification of Compliance Status report must contain all the information specified in paragraphs (e)(1) through (8) of 40 CFR 63.7545 as applicable.

[40 CFR 63.9(h)(2)(ii), 63.10(d)(2), 63.7545(e)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these notification requirements are not met.

Initial compliance requirements [15A NCAC 02Q .0508(f), 40 CFR 63.7510]

- j. The Permittee shall demonstrate compliance with the limits in Section 2.1 B.7.g by conducting initial performance test(s) and fuel analyses, establishing operating limits and conducting continuous monitoring system (CMS) evaluation(s) as necessary according to 40 CFR 63.7510, 63.7525 and 63.7530. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

Subsequent compliance requirements [15A NCAC 02Q .0508(f), 40 CFR 63.7515]

- k. The Permittee shall conduct subsequent performance tests and fuel analyses as necessary according to 40 CFR 63.7515.
- l. The Permittee shall demonstrate continuous compliance with each emission limit and operating limit that applies according to 40 CFR 63.7540.
- m. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Sections 2.1 B.7.k and l are not met.

Monitoring requirements [15A NCAC 2Q .0508(f), 40 CFR 63.7525]

- n. The Permittee shall install, operate, and maintain an oxygen analyzer system, as defined in 40 CFR 63.7575, or install, certify, operate and maintain continuous emission monitoring systems for CO and oxygen (or carbon dioxide) according to the procedures 40 CFR 63.7525(a).
- o. The Permittee shall meet the requirements for all monitoring systems as applicable according to 40 CFR 63.7525.
- p. Under the provisions of NCGS 143.215.108, the Permittee shall burn biomass in the wood fired boiler (**ID No. ES-BW-1**) that has a moisture content greater than 40 percent on an as-fired annual heat input basis as demonstrated by monthly fuel analysis to ensure that the boiler remains classified as a hybrid suspension grate boiler as defined in 40 CFR 63.7575. The Permittee shall conduct the following:

- i. The Permittee shall develop a site-specific fuel analysis plan.
- ii. The Permittee shall submit the site-specific fuel analysis plan to the NC DAQ – SSCB for review and approval no later than 60 days prior to May 20, 2019.
- iii. The Permittee shall conduct the fuel analysis in accordance DAQ approved site-specific fuel analysis plan.
- q. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Sections 2.1 B.7.n through p are not met.

Work Practice Standards [15A NCAC 02Q .0508(f)]

- r. The Permittee shall conduct a tune-up of the source(s) every year as specified below. The Permittee shall conduct the tune-up while burning the type of fuel (or fuels in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler or process heater over the 12 months prior to the tune-up.
 - i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown;
 - ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
 - iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown);
 - iv. Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject; and
 - v. Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

[40 CFR 63.7500(a), §63.7540(a)(10)]
- s. Each tune-up shall be conducted no more than 13 months after the previous tune-up. [40 CFR 63.7515(d)]
- t. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [40 CFR 63.7540(a)(13), 63.7515(g)]
- u. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Sections 2.1 B.7.r through t are not met.

Energy Assessment Requirements [15A NCAC 02Q .0508(f)]

- v. The Permittee shall have a one-time energy assessment performed by a qualified energy assessor. The energy assessment must address the requirements in 40 CFR Part 63, Subpart 5D, Table 3, with the extent of the evaluation for items (a) to (e) in Table 3 appropriate for the on-site technical hours listed in 40 CFR 63.7575: [40 CFR 63.7500(a)(1), Table 3] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

Recordkeeping Requirements [15A NCAC 02Q .0508(f), 40 CFR 63.7555]

- w. The Permittee shall:
 - i. Keep a copy of each notification and report submitted to comply with Subpart 5D, including all documentation supporting any Initial Notification or Notification of Compliance Status, or semiannual compliance report that has been submitted.

[40 CFR 63.7555(a)(1), 63.10(b)(2)(xiv)]
 - ii. Keep records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations. [40 CFR 63.10(b)(2)(viii)]
 - iii. Maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (A) through (C) below:
 - A. The concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;
 - B. A description of any corrective actions taken as a part of the tune-up; and
 - C. the type and amount of fuel used over the 12 months prior to the annual adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

[40 CFR 63.7540(a)(10)(vi)]
 - iv. For each CEMS, COMS, and continuous monitoring system, keep records according to paragraphs (b)(1) through (5) of 40 CFR 63.7555.

- v. Keep records required in Table 8 of Subpart 5D including records of all monitoring data and calculated averages for applicable operating limits, such as opacity, pressure drop, pH, and operating load, to show continuous compliance with each emission limit and operating limit that applies.
- vi. Keep the applicable records in paragraphs (d)(1) through (13) of 40 CFR 63.7555.
- x. The Permittee shall:
 - i. Maintain records in a form suitable and readily available for expeditious review;
 - ii. Keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and
 - iii. Keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years. [40 CFR 63.7560, 63.10(b)(1)]
- The Permittee shall maintain monthly records biomass fuel moisture content; and
- y. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Sections 2.1 B.7.w and x are not met.

Reporting Requirements [15A NCAC 02Q .0508(f), 40 CFR 63.7550]

- z. The Permittee shall submit a compliance report to the DAQ on a semiannual basis, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June.
 - i. The first compliance report shall be postmarked on or before July 30, 2019 and cover the period from May 20, 2019 through June 30, 2019.
 - ii. The compliance reports shall also be submitted electronically to the EPA via the procedures in 40 CFR 63.7550(h).
- aa. The compliance report shall contain:
 - i. The information in 40 CFR 63.7550(c) as applicable.
 - ii. For each deviation from an emission limit or operating limit, the report shall contain the information in 40 CFR 63.7550(d) and (e) as applicable.
- bb. Within 60 days after the date of completing each performance test (defined in 40 CFR 63.2) including any associated fuel analyses and/or CEMS performance evaluation (defined in 40 CFR 63.2) as required by Subpart 5D, the Permittee shall submit the results to the DAQ pursuant to 40 CFR 63.10(d)(2) and to the EPA via the procedures in 40 CFR 63.7550(h).

C. Two continuous steam-heated, dual path lumber drying kilns (ID Nos. ES-CDPK1 and ES-CDPK2)

The following table provides a summary of limits and standards for the emission sources described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	$E = 4.10 P^{0.67}$ Where E = allowable emission rate (pounds/hour) P = process weight rate (tons/hour)	15A NCAC 02D .0515
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Volatile organic compounds	4.11 pounds per thousand board feet of lumber; and 282.4 tons per consecutive 12-month period per kiln 137,415,000 board feet of lumber dried per consecutive 12-month period per kiln	15A NCAC 02D .0530 PSD
Hazardous air pollutants	Plywood and Composite Wood Products Manufacturing MACT - No applicable requirements other than initial notification.	15A NCAC 02D .1111 MACT 40 CFR Part 63, Subpart DDDD
Odors	State-enforceable Only See Multiple Emissions Section 2.2 A.1.	15A NCAC 02D .1806

1. 15A NCAC 02D .0515: PARTICULATE FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from lumber drying kilns (**ID Nos. ES-CDPK1 and ES-CDPK2**) shall not exceed an allowable emission rate as calculated by the following equation for process rates less than or equal to 30 tons per hour:

$$E = 4.10 P^{0.67}$$

Where E = allowable emission rate in pounds per hour

P = process weight rate in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the Permittee shall perform in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for particulate emissions from the drying of lumber in the kilns.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from the lumber drying kilns (**ID Nos. ES-CDPK1 and ES-CDPK2**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for visible emissions from the drying of lumber in the kilns.

3. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. The Permittee shall comply with the PSD Final Determination by the Division of Air Quality dated October 3, 2012. Pursuant to 15A NCAC 02D .0530 "Prevention of Significant Deterioration" {40 CFR 51.166(j) Best Available Control Technology Review (BACT)} and the PSD, Final Determination, the Permittee shall comply with the following BACT limits for the lumber kilns (**ID Nos. ES-CDPK1 and ES-CDPK2**):
- 4.11 pounds of volatile organic compound (VOC) emissions per thousand board feet of lumber
 - 282.4 tons of volatile organic compound (VOC) emissions per consecutive 12-month period per kiln.
 - 137,415,000 board feet of lumber dried per consecutive 12-month period per kiln.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the Permittee shall perform in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.3.a.i above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- c. The Permittee shall operate and maintain the lumber kilns (**ID Nos. ES-CDPK1 and ES-CDPK2**) in accordance with the manufacturer's specifications or a site-specific plan approved by the NC DAQ Regional Administrator.
- d. Calculations of VOC emissions per month shall be made at the end of each month. VOC emissions shall be determined by multiplying the total amount of lumber dried in each kiln each month by the emission factor of 4.11 pounds VOC per thousand board feet (MBF) of lumber dried or by a site-specific emission factor approved by the NC DAQ Regional Supervisor. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the VOC emissions exceed the limit given in Section 2.1 C.3.a.ii above.
- e. The maintenance performed on the kilns, the amount of lumber dried in the kilns, the VOC calculations, and the amount of VOC emitted from each kiln shall be recorded each month in a logbook (written or electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the maintenance performed on the kilns and the MBF of lumber dried and the VOC emitted during the past 12-month period is not recorded.

Reporting [15A NCAC 02Q .0508(f)]

- f. The Permittee shall submit a semiannual summary report of monitoring and recordkeeping activities given in Sections 2.1 C.3 c through e above postmarked on or before January 30 of each calendar year for the preceding six-month period and on or before July 30 of each calendar year for the preceding six-month period. The report shall contain the following:
 - i. The monthly volatile organic compound emissions from each kiln for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months; and
 - ii. The monthly quantities of lumber dried in each kiln for the previous 17 months. The amount of lumber dried must be calculated for each of the 12-month periods over the previous 17 months; and
 - iii. All instances of deviations from the requirements of this permit must be clearly identified.

D. One steam-heated lumber drying kiln (ID No. ES-K1-4)

The following table provides a summary of limits and standards for the emission sources described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Volatile organic compounds	94.26 tons per consecutive 12-month period 5.73 pounds per thousand board feet of lumber dried	15A NCAC 02D .0530 PSD
Hazardous air pollutants	Plywood and Composite Wood Products Manufacturing MACT - No applicable requirements other than initial notification.	15A NCAC 02D .1111 MACT 40 CFR Part 63, Subpart DDDD

1. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. The Permittee shall comply with the PSD Final Determination by the Division of Air Quality dated March 11, 1997. Pursuant to 15A NCAC 02D .0530 "Prevention of Significant Deterioration" {40 CFR 51.166(j) Best Available Control Technology Review (BACT)} and the PSD, Final Determination, the Permittee shall comply with the following BACT limits for lumber kiln (**ID No. ES-K1-4**):
 - i. 5.73 pounds of volatile organic compound (VOC) emissions per thousand board feet of lumber
 - ii. 94.26 tons of volatile organic compound (VOC) emissions per consecutive 12-month period.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the Permittee shall perform in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.1.a.i above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- c. Calculations of VOC emissions per month shall be made at the end of each month. VOC emissions shall be determined by multiplying the total amount of lumber dried in the kiln each month by the emission factor listed on the NC DAQ spreadsheet¹ for lumber drying kilns or an approved site-specific emission factor. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the VOC emissions exceed a limit given in Section 2.1 D.1.a above.
- d. The amount of lumber dried in the kiln, the calculations, and the amount of VOC emissions from the kiln shall be recorded monthly in a logbook (written or electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the amounts of lumber dried and VOCs emitted are not monitored and recorded.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a semiannual summary report of monitoring and recordkeeping activities given in Sections 2.1 D.1.c and d above postmarked on or before January 30 of each calendar year for the preceding six-month period and on or before July 30 of each calendar year for the preceding six-month period. The report shall contain the following:
 - i. The monthly volatile organic compound emissions from kiln for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months; and
 - ii. The monthly quantities of lumber dried for the previous 17 months; and
 - iii. All instances of deviations from the requirements of this permit must be clearly identified.

¹ The DAQ spreadsheet is located at <http://daq.state.nc.us/permits/spreadsheets/>. The current version entitled "Wood Kiln Emissions Calculator Revision C July 2007" has a VOC emission factor of 4.09 lbs per thousand board feet for steam heated kilns.

2.2 – Multiple Emission Source(s) Specific Limitations and Conditions

A. Facility-wide affected sources

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Odors	State-enforceable only Odorous emissions must be controlled	15A NCAC 02D .1806

State Enforceable Only

1. **15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS**

The Permittee shall not cause, allow, or permit the emission sources to be operated without employing suitable measures for the control of odorous emissions.

SECTION 3 - GENERAL CONDITIONS (version 5.2, 04/03/2018)

This section describes terms and conditions applicable to this Title V facility.

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]

1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]

In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]

Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]

The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY

The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Permit Modifications**

1. Administrative Permit Amendments [15A NCAC 02Q .0514]
The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
3. Minor Permit Modifications [15A NCAC 02Q .0515]
The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
4. Significant Permit Modifications [15A NCAC 02Q .0516]
The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
5. Reopening for Cause [15A NCAC 02Q .0517]
The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**

1. Reporting Requirements
Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
 - a. changes in the information submitted in the application;
 - b. changes that modify equipment or processes; or
 - c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
 - a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
 - b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
 - i. the changes are not a modification under Title I of the Federal Clean Air Act;
 - ii. the changes do not cause the allowable emissions under the permit to be exceeded;
 - iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
 - iv. the Permittee shall attach the notice to the relevant permit.
 - c. The written notification shall include:
 - i. a description of the change;
 - ii. the date on which the change will occur;
 - iii. any change in emissions; and
 - iv. any permit term or condition that is no longer applicable as a result of the change.
 - d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
3. Off Permit Changes [15A NCAC 02Q .0523(b)]
The Permittee may make changes in the operation or emissions without revising the permit if:
 - a. the change affects only insignificant activities and the activities remain insignificant after the change; or
 - b. the change is not covered under any applicable requirement.
4. Emissions Trading [15A NCAC 02Q .0523(c)]
To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I.A. Reporting Requirements for Excess Emissions and Permit Deviations [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]
“**Excess Emissions**” - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. (*Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.*)

“**Deviations**” - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

Excess Emissions

1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
 - a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
 - i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
 - name and location of the facility;
 - nature and cause of the malfunction or breakdown;
 - time when the malfunction or breakdown is first observed;
 - expected duration; and
 - estimated rate of emissions;
 - ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
 - iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

Permit Deviations

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
 - a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.B. Other Requirements under 15A NCAC 02D .0535

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

J. Emergency Provisions [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
 - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
 - b. the permitted facility was at the time being properly operated;
 - c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
 - d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. **Permit Renewal** [15A NCAC 02Q .0508(e) and 02Q .0513(b)]

This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least six months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]

1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]

The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall

comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. Certification by Responsible Official [15A NCAC 02Q .0520]

A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. Permit Shield for Applicable Requirements [15A NCAC 02Q .0512]

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
 - a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
 - b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
 - c. the applicable requirements under Title IV; or
 - d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. Termination, Modification, and Revocation of the Permit [15A NCAC 02Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. Insignificant Activities [15A NCAC 02Q .0503]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. Property Rights [15A NCAC 02Q .0508(i)(8)]

This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. Inspection and Entry [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
 - a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
 - b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
 - c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.

2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]

1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q .0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History** [15A NCAC 02Q .0507(d)(4)]

The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(e)]

1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]

If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1)** – FEDERALLY-ENFORCEABLE ONLY

Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]

This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. **Air Pollution Emergency Episode** [15A NCAC 02D .0300]

Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. **Registration of Air Pollution Sources** [15A NCAC 02D .0202]

The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. **Ambient Air Quality Standards** [15A NCAC 02D .0501(c)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. **General Emissions Testing and Reporting Requirements** [15A NCAC 02Q .0508(i)(16)]

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
 - a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
 - i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
 - ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
 - iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
 - b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

KK. Reopening for Cause [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
 - a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
 - b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
 - c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
 - d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. Reporting Requirements for Non-Operating Equipment [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

MM. Fugitive Dust Control Requirement [15A NCAC 02D .0540]

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas, stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. Specific Permit Modifications [15A NCAC 02Q .0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
 - a. a description of the change at the facility;
 - b. the date on which the change will occur;
 - c. any change in emissions; and
 - d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the

application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]

For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

ATTACHMENT

List of Acronyms

AOS	Alternate Operating Scenario
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
DAQ	Division of Air Quality
DEQ	Department of Environmental Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standard
OAH	Office of Administrative Hearings
PM	Particulate Matter
PM₁₀	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO₂	Sulfur Dioxide
tpy	Tons Per Year
VOC	Volatile Organic Compound